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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,833	04/14/2004	Yasushige Ishihara	17641	5644
23389	7590	12/07/2006	EXAMINER	
SCULLY SCOTT MURPHY & PRESSER, PC 400 GARDEN CITY PLAZA SUITE 300 GARDEN CITY, NY 11530			SMITH, PHILIP ROBERT	
			ART UNIT	PAPER NUMBER
			3739	

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/823,833	ISHIHARA ET AL.	
	Examiner	Art. Unit	
	Philip R. Smith	3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/14/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

- [01] The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 U.S.C. 112, Paragraph Two

- [02] The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- [03] Claims 1-5,7-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- [04] Claims 1 & 7 recite "position adjusting means for adjusting the relative positional relation between the end face of the fiber bundle close to the light source and light, which is emitted from the light source and is incident on the fiber bundle."
- [05] The recitation implies an adjustment of the relative positional relation between the fiber bundle and *incident light*. This is not distinct.
- [06] It is presumed for the purposes of applying art under 35 U.S.C. §102 and §103 that the position adjusting means adjusts the relative positional relation between the fiber bundle and the *light source*, not the light which is emitted therefrom.

Claim Rejections - 35 USC § 102

- [07] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[08] Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Sasaki (7,087,014).

[09] With regard to claims 1,6,7: Sasaki discloses an optical imaging system comprising:

[09a] a light source ("white LED 27," 5/61) for emitting light to a sample;

[09b] a small-diameter probe ("insertion portion 12," 5/1) having a needle portion at the distal end of the probe with which the distal end of the probe is insertable into the sample;

[09c] a fiber optic bundle ("fiber-optic light guide 17," 5/66), arranged in the probe, for guiding light from the light source to the sample;

[09d] light detecting means ("objective glass," 4/59) for detecting light reflected by the sample;

[09e] image generating means ("TV monitor," 4/61) for generating an image on

the basis of signals obtained by the light detecting means;

[09f] connecting means ("video processor 15," 4/63, comprising "socket 15b," 4/49) for detachably connecting the probe to the light source; and

[09g] position adjusting means ("auxiliary lighting device 18...an operating position... and a retracted position," 5/18-29) for adjusting the relative positional relation between the end face of the fiber bundle close to the light source and light, which is emitted from the light source and is incident on the fiber bundle.

[10] With regard to claim 2,8: Sasaki discloses that the position adjusting means is arranged inside the connecting means ("[t]he video processor 15 is provided therein with an auxiliary lighting device 18," 4/63-64).

[11] With regard to claim 3,9: Sasaki discloses an automatic control means (7/25-35) for automatically controlling the position adjusting means:

If the main lamp 16 goes out accidentally, a detector circuit (not shown) connected to the aforementioned controller that is provided in the auxiliary lighting device 18 detects this failure in the main lamp 16. Upon this detection by the detector circuit, the controller switches ON the white LED 27 and actuates the rotary solenoid S at the same time. Upon the commencement of operation of the rotary solenoid S, the rotary plate 26 rotates about the pivot 25a clockwise as viewed in FIG. 4 to move from the non-operational position shown in FIG. 4 to an operational position shown in FIG. 5.

[12] With regard to claim 4,10: Sasaki discloses first converging means ("positive lens 29," 5/58), arranged between the end face of the fiber optic bundle close to the light source and the light source, for converging the light from the light source to the fiber bundle, wherein the position adjusting means adjusts the relative positional relation between the first converging means and the end face of the fiber

optic bundle close to the light source ("[a] lens holder 28 which holds a positive lens 29 is fixed to the front of the LED holder 27a...", 5/58-60).

- [13] With regard to claim 5,11: Sasaki discloses that the position adjusting means adjusts the position of the first converging means (7/25-35, as noted above).

Additional Claim Rejections - 35 USC § 102

- [14] Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeuchi (5,800,343).

- [15] With regard to claims 1,6,7: Takeuchi discloses an optical imaging system comprising:

[15a] a light source ("lamp 11," 4/45) for emitting light to a sample;

[15b] a small-diameter probe ("insertion rod 2," 4/5) having a needle portion at the distal end of the probe with which the distal end of the probe is insertable into the sample.

[15c] a fiber optic bundle ("light guide 16S," 4/58), arranged in the probe, for guiding light from the light source to the sample;

[15d] light detecting means ("observation window 6," 4/8) for detecting light reflected by the sample;

[15e] image generating means (an endoscope inherently has a display or eyepiece) for generating an image on the basis of signals obtained by the light detecting means;

[15f] connecting means ("light source 10," 4/61) for detachably connecting the probe to the light source; and

[15g] position adjusting means ("light guide connector 8S," 5/57, having "V-shaped groove 33S" and "set screws 34," 6/4-29) for adjusting the relative positional relation between the end face of the fiber bundle close to the light source and light, which is emitted from the light source and is incident on the fiber bundle.

[16] With regard to claim 2,8: Takeuchi discloses that the position adjusting means is arranged inside the connecting means (see Figs 3, 4, 5).

[17] With regard to claim 4,10: Takeuchi discloses first converging means (comprising "condenser lens 13," 5/66, and "corrective lens 22S," 5/17), arranged between the end face of the fiber optic bundle close to the light source and the light source, for converging the light from the light source to the fiber bundle, wherein the position adjusting means adjusts the relative positional relation between the first converging means and the end face of the fiber optic bundle close to the light source (5/39-56).

[18] With regard to claim 5,11: Takeuchi discloses that the position adjusting means adjusts the position of the first converging means ("corrective lens 22S" composes adaptor pipe 20S," which is adjustable as directed in 6/4-29, as noted above).

Claim Rejections - 35 USC § 103

[19] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[20] Claims 3,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Takeuchi.

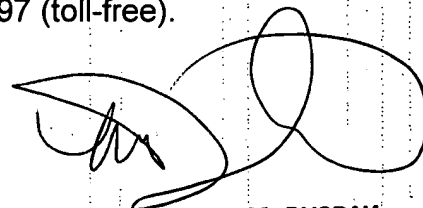
[21] Takeuchi discloses the claimed invention except for automatic control means for automatically controlling the position adjusting means. It would have been obvious to one having ordinary skill in the art at the time the invention was made to automate the position control instructed by Takeuchi, since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. *In re Venner*, 120 USPQ 192. A skilled artisan would be motivated to do so in order to maneuver the components with greater precision, or relieve the operator of laborious adjustment.

Conclusion

[22] The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arai (6,969,348); Ayame (6,635,012); Sugimoto (6,231,503) disclose a light source connector with an adjustable focal point. Kazakevich (6,921,920; 6,692,431) teaches the relationship between acceptance angle and light transfer maximization.

Art Unit: 3739

- [23] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip R. Smith whose telephone number is (571) 272 6087 and whose email address is philip.smith@uspto.gov. The examiner can normally be reached between 9:00am and 5:00pm.
- [24] If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (571) 272 4764.
- [25] Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LINDA C. M. DVORAK
SUPERVISORY PATENT EXAMINER
GROUP 3700